AMERICAN INVENTIVE GENIUS.

We shall not soon forget the chilling auspices for Americans under which the World's Exhibition opened last year in London. A vast space in a conspicuous part of the Palace sparsely filled with a Noah's-Ark assortment of badly disposed articles—cabals and heart-burnings among our countrymen in London respecting the choice of American Commissioner, &c.—British jealousy and hatred of American Manufactures boiling over in sneers and slurs from the great majority of London's ably written and unscrupulous journals—and general mortification and chagrin diffusing and deepening among the Americans who had gathered to study the Exhibition. 'How I wish we had sent nothing!' was a very general exclamation, in view of the 'aching void' presented—so much that should have been sent being absent, while a good deal that need not have been sent loomed up on that bleak Sahara in gaunt and unsightly proportions.

So plain was our apparent failure, that the better class of Englishmen regarded it with compassion, which was evinced even in the Council. Philip Pusey, Esq., Member of Parliament, Chairman of the Jury on Implements of Agriculture, and as true and worthy a gentleman as breathes, there proposed that the contributors of each Nation should be judged by themselves, and prizes awarded according to their merits thus tested. Thus a first prize might be given to the best British Plow, the second to the second-best British Plow, &c., and in like manner with those of America, France, Belgium, &c. This proposal was prompted by the kindness of his heart; he thought that, if tested by common or absolute standards, Great Britain, at least in *his* department, must receive nearly all the prizes, while America and most other nations btained none. We earnestly opposed this proposition, urging that if other Nations had a better Plow, for instance, than we had, then our people were interested in knowing the fact, while it was of comparatively no consequence to them to be told by our awards that this was the best American, that the best English, another the best French Plow, &c. What the Farmers universally needed to know was which was the best Plow for a specified service, no matter where made. Mr. Pusey's proposition did not prevail.

Mr. Hobbs's Lock-picking achievements (though they had not yet reached their climax) had made some sensation, but none that reached the Council, when on the 29th of July, at Mr. Mechi's annual Agricultural festival at his estate, Tip-tree Hall, the '*Virginia Reaper*,' of Mr. C. H. McCormick, achieved its decided and brilliant triumph, to the delight of all the Americans in England and to the utter surprise of their rivals. That success was the pivot of our fortunes. Thenceforth no American, even the most asinine, proclaimed himself ashamed of his Country, because of her miserable figure in the Exhibition; the Council of Chairmen of Juries at once, on the urgent representation of Mr. Pusey, though it had met (on the 30th) to complete its awards, granted an exclusive and special dispensation for a further trial of McCormick's Reaper, in order to determine, by another trial, on dry grain, (that at Mechi's having been made on green, under a pouring rain,) whether the Reaper was indeed worthy the highest prize that would be given for any article exhibited—namely, the Council Medal. That second trial was had at Mr. Pusey's farm, on the 6th of August, and resulted in another emphatic verdict in favor of the 'Virginia Reaper,' which therefore received the Great Medal. At this trial the inventor was present, (having arrived in England two days before,) though he took no part in the trial. A side interest was excited by a competition with Hussey's Reaper, another American invention, which broke down (clogged) at Mechi's, but which did very well at Pusey's, though not so well as McCormick's. Some weeks afterward, a third trial between these two machines was made (not under the auspices of the Exhibition) at Cleveland—Mr. McCormick having left England, and Mr. Hussey having arrived there—and a judgment given in favor of Hussey's machine. We have before us a pamphlet by Mr. McCormick, stating why and wherein this trial was partial, unfair and inconclusive—but we do not care to enter into that question. We only wished to repel an intimation that Mr. Hussey has inconsiderately thrown out that he was unjustly dealt with in the award of the Great Medal to McCormick. That award was made on the strength of two several trials, in the earlier of which Hussey's machine utterly failed, while in the latter it was fairly beaten. Mr. Hussey attributes that defeat to the fact that his machine was operated at the two Exhibition trials by an inexperienced hand—which, if true, was his misfortune, but not the fault of the Council, which afforded extra opportunities for the trial of Reaping Machines, and rendered the only award which these trials would justify.

—We have said that the triumph of McCormick's Reaper at Mechi's was the turning point of American fortune at the Exhibition. Thenceforward our department of the Exhibition, meager and unsightly as it was compared with what it might have been, was regarded with an eager and respectful interest, but especially our Agricultural implements. The triumph of the yacht 'America' and the culmination of Hobbs's Lock-picking feats followed soon after, and were proudly hailed; but the Reaper's was the success which broke the prestige of European superiority in the Useful Arts and transformed chagrin into exultation. It was this which caused *The* [London] *Times*, on the 26th of September, to say:

"One point that strikes us forcibly on a survey of the last few months, is the extraordinary contrast which the attractive and useful features of the display present. It will be remembered that the American department was at first regarded as the poorest and the least interesting of all foreign countries. Of late it has justly assumed a position of the first importance, as having brought to the aid of our distressed agriculturists a machine which, if it realizes the anticipations of competent judges, will amply remunerate England for all her outlay connected with the Exhibition. The Reaping Machine from the United States is the most valuable contribution from abroad to the stock of our previous knowledge that we have yet discovered, and several facts in connection with it are not a little remarkable."

—And this brings us to the moral we had intended ere this to inculcate—that the field of Invention in aid of Agriculture is broad, inviting, and to a great extent still untrodden. We have barely begun to bring the potent resources of Science to the aid of the food-grower, and very much is to be done in their development and application within the next ten years. There is now obvious need of a Locomotive Plow, able to break up and thoroughly pulverize the soil to the depth of two feet or more if required, at the rate of ten or fifteen acres per day, tossing stones of two or three hundred pounds aside and uprooting stumps in its steady progress. The value of such a machine would not be measured by its cheapening of the cost of plowing per acre, for it would prove an antidote to drouth, and would soon secure at least double the harvest usually obtained from our shallowly and shabbily plowed fields. And more: it would enable the farmer to plow at precisely the right time, when his soil is in the proper condition, instead of being obliged to break up the soil out of season and in all weathers in order to have it done at all. Thus the high British estimate of McCormick's Reaper is based less on its estimated saving of expense than on the fact that it enables the farmer to take advantage of any temporary break in the dull weather so common there, and harvest a hundred acres of Wheat while he would be saving a quarter of it in the old way. Yet the economy of this and kindred machines is also very great. In the pamphlet before us, we note that the saving by the Reaper is variously estimated by farmers who have used it at $15 to $25 per day.

—Why should not our young men of talent and energy devote both to the contemplation of our Implements of Agriculture, with a view to their improvement? Consider what strides the last century has witnessed in the improvement of machinery for the production of Fabrics, while the machinery for the growth of Food has advanced comparatively little. And, backward as we are, we are far in advance of most other nations. Italy, beautiful, suffering Italy, needs to-day Millions of Dollars' worth of such implements as we could profitably send her if she only knew how much she might profit by them; and a thousand ingenious, observing, intelligent, stirring Yankees diffused among her people as apostles of Agricultural Improvement, (especially with the schoolmaster to aid them,) would do her immeasurable good, if her jealous and stupid tyrants would but let them. There are broad fields of effort now open or opening to those inclined and qualified to labor for Human Progress, and prominent among them is the field of Agricultural Improvement by Machinery. Let it not be neglected; and let those who achieve brilliant successes therein be duly honored and rewarded.

THE MYSTERIES OF SCIENCE.

Very justly prominent among the scientific men of the present day is Baron CHARLES VON REICHENBACH. Endowed with a genius as bold as it is active and an intellect equally acute and free from prejudice, after a career of nearly thirty years in extensive industrial enterprizes, such as iron foundries, chemical laboratories, beet sugar factories, in which he amassed an immense fortune, while his discoveries in chemistry and his contributions to geology assured him a high and solid reputation, the ordinary tribe of savans were astonished to see him quitting the beaten tracks of scientific research to venture into the mysterious and shadowy domain of human magnetism, hitherto resigned mainly to the possession of charlatans and wonder-workers by trade. Few books of recent times have produced a deeper sensation in the world of scientific orthodoxy than Reichenbach's *Dynamics of Magnetism*. In that work the distinguished author discusses questions which his colleagues had before avoided with all the originality and boldness that must characterize a scientific discoverer and all the clearness of statement and the coolness of self-possession with which he would discuss an ordinary problem in geometry or chemistry.

It is the opinion of Baron Reichenbach that he has discovered a new fluid, or rather a new dynamic element in nature. This is distinct from magnetism, electricity, heat and light, though akin to them. It is of a finer and less palpable character than either of those elements, and is perceptible only to persons of a more delicate nervous organization. This element he calls "Od," a name whose etymology he has not yet explained—and those who are subject to and can perceive its influence, he distinguishes as "sensitive." These are the persons who are generally regarded as capricious and whimsical; who cannot bear the color of yellow, while more than others they love the color of blue; who hate to look at themselves in a glass; who will not sit on the middle of a bench with others, but insist on having the corner seat; who cannot sleep on the left side; who cannot eat with a spoon or fork of German silver, or of any composition made to imitate silver; who cannot eat warm, much-cooked, fat or sweet food, but have a passion for sour dishes; who dislike the heat of an iron stove, while they will bear an even greater heat from one of clay or porcelain; who, in an omnibus or railroad car, insist on having the windows open, no matter what the weather, and no matter whether their fellow travelers fear colds and rheumatism or not; who cannot bear to have any one behind their chair, and do not like to shake hands who are subject to the influence of the moon and shun its light as disagreeable, &c. &c. These peculiarities, says Reichenbach, you do not find singly, but always the same person possesses several to them. They are not mere caprices, but genuine perceptions of real facts, which, however, the mass of men are not organized to appreciate. Indeed, he says, there are two sorts of men, those who have nothing of this impressibility, and those who are acted upon in the manner above described. The latter are, strictly speaking, "sensitive," and, in fact, are often more susceptible than the Mimosa. And they are so in their inmost constitution, which they can neither altogether lay off nor deaden.

The present statements are derived from a series of articles, which Reichenbach is now publishing in the Augsburg *Allgemeine Zeitung*, under the title of *Odisch-Magnetische Briefe* (Odylic-Magnetic Letters.) In these articles he details a number of curious but simple experiments which any one may verify for himself without difficulty, and which go far to establish the existence of this new fluid or elemental force in nature. It is only necessary to find a person belonging to the class our author calls "sensitive." It is, he says, not at all difficult to find such; they are numerous everywhere. If you do not at once find those who are perfectly healthy, inquire for restless persons who have unquiet sleep, who, when asleep, cast off the covering, talk or get up in their dreams, are troubled much by short fits of head-ache, often complain of sudden pain in the stomach, of being out of sorts nervously, who do not like large companies, but prefer the society of a few friends or even solitude. With rare exceptions these people are of more or less sensitive constitution.

But these are only the trivial aspects of the subject; when tried by the test of scientific experiment, things of quite another scope are manifested. Procure a natural crystal, as large a one as possible, either a gypsum spar of about eight inches long, or a sulphur spar, or a Gothard rock crystal of a foot long, and lay it horizontally across the corner of a table or the arm of a chair, so as to leave the two extremities free. Then bring the sensitive person up to it with directions to hold the palm of the left hand toward the ends of the crystal, at a distance of three, four, or six inches. In the course of a minute he will tell you that from the apex of the crystal a cool current strikes the hand, but that when the hand is held toward its base a sensation of lukewarmness is produced. The coolness he will find pleasant and refreshing; the lukewarmness is accompanied by an unpleasant, repulsive, and almost nauseating sensation, which, if the hand is continued there, presently seizes upon the arm and renders it, as i were, altogether fatigued.

When Reichenbach first observed this phenomenon it was as new as it was inexplicable. Nobody would believe it. Since then he has repeated it on hundreds of sensitive persons (at Vienna) and it has been tried in England, Scotland and France, and any one can easily try it. Let a sensitive person hold his left hand near other parts of a crystal, and he will feel now tepid and now cool emanations, but they will be incomparably fainter than at the two opposite ends, which are also polar opposites. Persons who are not sensitive perceive nothing.

Since these opposite sensations can be produced without touching the crystals, at a distance of several inches, and with very sensitive persons at the distance of several feet, it was evident to Reichenbach that from these half-organized stones something emanated, flowed, radiated, which physical science had not yet recognized, and which, even if we are unable to see it, yet demonstrates its existence by corporeal effects. As sensitive persons are able to perceive by feeling so much more than others, it seemed possible that they might be superior in the sense of sight, and in deep darkness, might be able to see something of these singular emanations. In order to test this, on a very dark night, (May, 1844,) Reichenbach carried a very large rock crystal to the house of a highly sensitive young lady, Miss Angelina Sturmann; by accident, her physician, Prof. Lippich, a well-known German pathologist, was present. They produced perfect darkness in two rooms, in one of which Reichenbach placed the crystal in a place unknown to all but himself. After a brief delay in the other room, in order to accustom the eye to the darkness, they led the young lady into the room where the crystal was. Almost immediately she pointed out the spot where Reichenbach had placed it. She said that the entire body of the crystal was glowing with a delicate light, and that at its apex was in constant waving motion, a flame of blue color and bell shape, as large as one's hand, now and then sparkling, and disappearing in a sort of fine mist. At the other, or flat end of the crystal, she saw a slow, red and yellow smoke. This experiment has since been followed by thousands of others with crystals, in countless variations, down to the present time. The fact has been demonstrated by a great number of sensitive persons that the sensations produced by crystals are accompanied by appearances of light, which are blue, and red and yellow from the opposite poles of the crystals, and are perceived by sensitive persons alone.

This experiment can only succeed in absolute darkness. The crystal light is so delicate and so very weak, that if even a trace of other light is perceptible in the darkened room, it will suffice to confuse the sensitive observer, that is to deaden his sensibility for this extremely fain light. Moreover, few persons are so highly sensitive as the young lady above named, or so able to perceive this tender radiance after being for so brief a period in darkness. With ordinarily sensitive persons, says Reichenbach, it has generally required one or two hours in the dark for their eyes to become sufficiently free from the excessive impression of day or lamp light and prepared to perceive the light of the crystal.

But the same force will be found to emanate from other sources, with equal or greater power. Place a sensitive person in the shade and give him a common empty barometer tube, or even an ordinary cane in the left hand. The tube or stick must be held in the sun, while the person and the hand remain in the shade. You will presently be astonished by the result of this simple experiment. You will expect that the person will feel the tube or stick growing warm. But the fact will be exactly the reverse. The sensitive hand will experience various sensations, but the result will be one of coolness. I raw the stick back into the shade, and the coolness will cease and the stick will feel warm again; put it back in the sun and it will again become cool, and so on; in this way the exactness of the sensation may be tested.—There are, therefore, very simple circumstances, not hitherto observed, in which the direct rays of the sun do not produce warmth but the contrary.

If this coolness be the effect of the new fluid called Od, it must in some way produce light in the dark. This you may try by repeating the following experiment. From a lighted room Reichenbach conducted a copper wire into a completely dark one. Then he held the other end of the wire in the sunshine. Hardly was this done when the portion of the wire that was in darkness began to shine, and at its point there rose the appearance of a flame about the size of one's finger. It was evident that the sun imparted an odylic substance to the wire which sensitive persons saw flowing forth in the darkness in the form of light.

But go a step farther; let the sunbeam fall upon a good glass prism so as to cast its colors on the nearest wall. Let the sensitive person try the colors one after another, with the glass tube in his left hand. Holding it so as to intercept only the blue or the violet color, he will experience a most agreeable sensation of coolness, much purer and cooler than from the entire ray of the sun. But if he puts the tube into the yellow, or still better into the red color, the agreeable sense of coolness will at once disappear and be succeeded by warmth and a disagreeable feeling of sultriness will soon weigh on the whole arm. Instead of the tube you may place a naked finger of the sensitive person in the colors and the effect will be the same; Reichenbach chooses a tube or a stick simply in order by a bad conductor to prevent the action on the hand of the actual rays of heat. These efforts of the separated sunbeam will be found exactly similar to those of the poles of crystals. This shows that Od of both kinds of efficiency is contained in the sunbeams; it flows to us with light from the orb of day at every moment, and forms a new and powerful agency whose extent we do not yet comprehend.

Recur for a moment to those haters of the color of yellow, and ardent lovers of blue, mentioned above. We saw that the same pole of the crystal which imparted agreeable coolness gave a blue light. We find here, that the blue ray in the sunbeam produces an altogether agreeable sensation of coolness. On the other hand, the red and yellow light of the opposite pole of the crystal, and the yellow and red ray of the sunbeam cause lukewarm and unpleasant sensations. We see, then, that in these two cases, remote as they are from each other, blue causes pleasant and red and yellow unpleasant sensations. This is an indication which may render us less prompt to condemn what we call the caprices of sensitive persons. We see that in fact there is something hidden in these colors beyond their mere optical effect on our retina; that a profound instinct for an unknown but most delicate something guides the feeling and the judgment of such persons; and that this is worthy of very careful attention.

But apart from color, there is another easy experiment, to distinguish the Od contained in the sunbeams. Polarize them in the well known manner, so as to let them fall at an angle of 35 degrees on a pile of a dozen panes of glass. Then let the sensitive observer hold the stick in his left hand, alternately in the reflected and transmitted light. You will always find that the first produces the sensation of odylic coolness, the second of odylic lukewarmness in the hand holding the staff.

Reichenbach gives another experiment for the benefit of the chemists. Take two equal glasses of water, put one in the reflected sun light and the other in the transmitted. After they have stood six or eight minutes, let a sensitive person taste them. He will tell you that the water from the reflected sunbeams tastes cool and somewhat acid; and that from the transmitted light tepid and bitter. Then put a glass of water in the blue light of the prism and another in the red and yellow; or put the one at the pointed end of a rock-crystal and the other at the butt end. In all three cases the sensitive person will find the water from the blue light agreeable and delicately acid, that from the red and yellow disgusting, bitter and acrid. The first glass he will empty with gusto; but if you constrain him to drink the other he will very surely vomit soon afterward. Then give the water to the chemical analyst to discover its bitter and acid principles if he can.

The same treatment is to be observed with moonlight as with sunlight. You will obtain similar results, though in some respects they will be reversed. A glass tube held by a sensitive person in full moonlight will give not cool but lukewarm sensations. A glass of water that has stood in the moonlight will be more tepid and unpleasant than one that has stood for the same time in the shade.

You are now impatient to learn what this is, and where in natural philosophy and physiology these phenomena are to be classed. They are not effects of heat, though they produce sensations like those of warmth and coolness; for there is, in crystals, at least, no source of warmth, and if there were, non-sensitive persons would perceive it as well as sensitive, or it would certainly affect a fine thermometer. They are not electricity, for in crystals there is no exciting cause for the constant currents which here flow forth; an electrometer is not affected and an attempt to apply a conductor, according to electrical laws, has no result. It is neither magnetism nor diamagnetism, because crystals are not magnetic, and diamagnetism does not act in the same way in all crystals, but in very different and opposing ways, which here is not the case. It cannot be ordinary light, because that never produces the sensations of tepidity and coolness.

Equally curious are the experiments in connection with terrestrial magnetism. Lay an ordinary magnet across the corner of a table, so that the two ends will project; then place the table so that the magnet will lie in the meridian, with its north pole to the north, and *vice versa*. A sensitive person will perceive with the palm of the left hand a cool current flowing from the north pole and a warmish one from the south. Glasses of water placed near the poles will be affected just as if placed in the reflected or transmitted sun light. So, also, in complete darkness, magnets exhibit odylic light to the eyes of sensitive persons. The light from the north pole of a magnet is blue—from the south pole, red and yellow. By holding the magnet vertically, with the south pole up, the light increases; if the magnet is strong enough, it rises to the ceiling, so that the sensitive person can distinguish colors painted there. Or, place a large horse-shoe magnet on a table, with the two poles upward. Two distinct flames will be seen rising from it. Unlike the magnetic currents, they do not mingle, and neither seems to influence the other. A magnet of a hundred pounds' power gave forth a light of great beauty, illuminating a space of six feet on the ceiling; objects held close to the flame cast a visible shadow; objects held over it turned it aside, and blowing it changed its direction, just as if it were any other flame; with a sun-glass, the light could be collected and condensed in a focus. The appearance is, therefore, altogether corporeal, and in many respects like ordinary flame. When two of these flames are brought together, they do not mingle, but penetrate each other; the stronger divides the weaker, which reünites itself after having been thus traversed; the same is the case when a stick is held in this flame. And, just as crystals appear to be prevaded with this luminous substance, so is it with the steel of magnets; every particle seems to be in a whitish glow. The same is the case with electro-magnets.

These phenomena are not magnetic, says Reichenbach. The emanations from a crystal of the same weight are much stronger than from a magnet, but the crystal possesses no magnetism. We have then, in these two cases, Od in connection with magnetism and without. Therefore Od must be regarded as an independent force, appearing sometimes in connection with magnetism, just as it appears in connection with crystals, with the sunlight, and with other natural phenomena. We know the resemblances of magnetism and electricity, we know that each appears in intimate connection with the other, and have come near regarding them as identical. So it is with light and heat; the one produces the other, and they are always found together, but we have never been able to demonstrate the common cause from which both have their origin. So it is with Od. We suppose these dynamic phenomena spring from a common source, but as long as we are unable to demonstrate this unity of their origin, there is nothing left but to consider them as electricity, magnetism, light, heat, &c., and to treat each as a special group of phenomena. And as the multiform Odylic phenomena can be classified in neither of these groups, we must combine them into a special group. That they are inferior either in extent or importance to none that have already obtained a place in physical science, our author promises to show hereafter.

A MUSICAL WORD.

Madame GOLDSCHMIDT has now given some 150 concerts in the United States, and has in all taken the "more popular course" of singing operatic airs and ballads. We are at a loss to divine therefore, why *The Times* chafes at the idea of her gratifying those "extremely refined tastes," which it adds, "are fortunately rare." *The Times*, of course, may have special reasons for congratulating itself upon the rarity of "extremely refined tastes." Our own feeling is, that such are not the least sincere in the homage they offer to Jenny Lind, and we venture to think their enjoyment of music is as "simply unspeakable" as any of which the "mass of listeners" are conscious. The crowd of readers may undoubtedly prefer a piratical romance of the Rev. Professor Ingraham's to Shakspere's Romeo and Juliet; but that would be scarcely a good reason for requesting an actor or reader never to gratify those who enjoyed the drama more.

—As to the admirable mass of blunders in *The Times's* statements respecting "the suggestion" of the two morning papers, we make bold to remind our sprightly neighbor that it was not suggested by one, nor advocated by another paper that at these final performances she should confine herself to what is termed classical, or operatic, music. It was hinted that ONE of the last three, and therefore only one of the whole number in America, should be devoted to what is termed "classical" music; and it was directly intimated that what is technically called *operatic* music, that is Italian bravura, might be excluded from the programme. The good *Times*, somewhat forgetful, proceeds to speak of those who "praise, coldly and reservedly, her *Casta Diva* or *Ah non giunge*," as if they were the guilty parties who were conspiring to defraud the general ear of *Comin' through the Rye*, &c. But the very two papers in question were the most enthusiastic of all admirers of the songs quoted. They neither "coldly praised" the Italian nor had any less than "unspeakable" delight in the ballads. The final rhetorical throe of our nascent neighbor about "the passionate absurdities of lachrymose tenor and brutal baritone," is simply a more sonorous expression of our own sentiments, often repeated in *The Tribune*, and it was against precisely that style of entertainment that "the suggestion" was made and advocated.

We cannot but entreat *The Times*—whose misappreciation of the scope of the suggestion is only equaled by its delightful ignorance of what constitutes "classical" music and of the character of the admiration of Jenny Lind in the papers alluded to—to consider that it is hard, after having had its own way a hundred and forty-nine times out of the hundred and fifty, not to allow those "refined tastes," so "fortunately rare," their poor little opportunity "coldly and reservedly" to praise Jenny Lind's singing of the music she prefers.

RELIGIOUS FREEDOM.

We have faith in the most perfect religious tolerance on the part of the State. We do not conceive it to be the business of any community or Government to inquire what is the religion or the no-religion professed or practiced by Mr. A. or Mr. B. So long as those individuals discharge their civil obligations as members of society and do not transgress the civil law, we hold it to be the right of each to believe or to disbelieve, according to the conclusions of his own judgment and the dictates of his own conscience. But another and a very different view from this is held by a large party in our country, and it seems advisable that the public should know what that view is. To that end we make the following extract from *The Shepherd of the Valley*, a large and influential Catholic journal, published at St. Louis. Speaking of the question of religious freedom, this paper says:

"We gain nothing by declaiming so earnestly against the doctrine of *the civil punishment of spiritual crimes*. Our enemies will not believe that we are better than our Church, and—for her—her history is before them; they know what she sanctioned during the Middle Ages, what she did then, and does now where she can; they know, too, what they would do, were they in power; they judge us by themselves. They can reason besides, and when we say *two and two*, they will add *make four*, whatever we can do to stop them. Heresy is a mortal sin, kills the soul, sends the entire man, body and soul, to Hell; it is, besides, a contagious disease, and affects the interest of unborn millions. Christian kings, believing this, *will crush it in the shell*. Christian States, knowing this, will drive it from their bodies when they can."

The same journal also says in the same article:

"It is notorious that the leaders of Catholic journalism in the United States have been unanimous, for some time past, in directing all their energies to the destruction of that cowardly system of misrepresentation and concealment, which led English Catholics, in the unhappy times from which we are emerging, to attempt—happily with very indifferent success—to throw dust in the eyes of cotemporary heretics, by disavowing the practices of their brethren in better days and other lands. We are by no means the only Catholic editor in the Union who thinks it better to be perfectly frank and honest, than to be "prudent"—to use the mildest term we can find—and we are not alone in dreading, above all things, the praise and sympathy and good will of heretics as such, and coveting, from them, nothing beyond some portion of that abuse which they keep upon all good Christians, upon our pastors, upon the Saints, and upon their most sweet and holy Queen."

We give one more extract:

"We will say, however, that we are not in favor of roasting heretics, and that, if this sort of work is to be revived—though *in our miserable times it is quite impossible, since men have no belief which they care to propagate, or for which they dare endure*—if persecution is to be renewed, we should rather be its victims than its agents; but we are not, therefore, going to deny the facts of history, or to blame the Saints of God and the doctors and pastors of the church for what they have done and sanctioned. We say that *the temporal punishment of heresy is a mere question of expediency*; that Protestants do not persecute us here, simply because they have not the power; and that where we abstain from persecuting them, they are well aware that it is merely because we cannot do so, or think that, by doing so, we should injure the cause that we wish to serve."

It is due to justice to say that these extreme notions are not held by all Catholics, nor countenanced by all the Catholic press of the country. *The Catholic Herald* of Philadelphia earnestly and temperately opposes them.

THE FINE ARTS.

Exhibition of the National Academy.

II.

It is the general opinion that the Exhibition is not as good as that of last year. We do not agree to it. The best men of last year have done better now. GRAY, HICKS, HUNTINGDON, KENSETT and ROSSITER have each finer single pictures, to our fancy, than anything they exhibited last spring. The good landscapes are inferior in number, certainly, but there was nothing last year better than KENSETT's *Early Autumn in the Franconia Mountains* (140), and *Reminiscence of the White Mountains* (417), or the *Norwegian Forests* (410), of CAPELLEN. The portraits are this year very numerous and very bad. We do not know if the Committee have any discretion in rejecting the offerings for the Exhibition. Probably they have not, as it might be a dangerous prerogative. But there are certain things upon the walls which, in the interest of the artists and the public, should not be presented to the general eye; except, perhaps, for the purpose of challenging that caustic criticism, which, if felt to be judicious, would a "quietus make" of such flagrant misdirection of time and labor as they evince.

We shall begin with the landscapes and with the largest of them. These are *The Spirit of War* (48) and *The Spirit of Peace* (50) by Mr. CROPSEY. The latter hangs in the same spot as his *Southern Italy* of last year. They are both pictures which have all his merits and all his faults. One might say that CROPSEY is too conscientious. Knowing that the landscape is composed of infinite detail, however grand the general impression, he seems unwilling that every bit of that detail should not have full justice. Each spire of grass, each shrinking leaf must appear upon the canvas, because it really exists in nature; and because every scene teems with an infinite variety of life and form, he does not feel satisfied unless every point of his picture does the same. Upon this effort CROPSEY lavishes his resources of color and the great fertility of his imagination. Each bit of the mosaic which forms his picture is sincerely studied and wrought with genuine feeling. Hence the eye roving over his canvas is attracted by a thousand beauties, is charmed by the conviction of the delicate observation and sympathetic touch of the artist, and wonders that the mass is not subdued and elaborated into a broad, general impression.

The effort to which this conscientiousness seduces him is hopeless. It is no less than the fault of the Düsseldorf school, although manifested in a less mechanical manner. When you look at the landscape it is the grace of a single tree and the harmonious consent of many trees in bold and beautiful groups—the languid winding of the stream—the dreamy ripple of vague hill outlines, or the solemn grandeurs of mountain precipices and the heaving sea, which make the landscape to the eye. The observer knows that each of those trees is an aggregate of infinite tissues, that each stream is a mass of drops, that each precipice has its own geological peculiarities—but they are not visible parts of the impression. The observer sees little of the wave and leaf, but the whole spirit and power of the landscape strike his eye and remain in his heart. To recall that impression and to deepen it by the revelation of the sweeter secrets which the eye of genius sees there, is to paint landscape. Let the artist study for years the formation of boughs, the texture of tissues—let him master the anatomy of every bit of moss and every splinter of rock, but remember that these are his exercises—the scales of his practice—the steps of his dancing; but none of them all must appear in his movement and his playing.

Now what the Düsseldorf men do in a small way, CROPSEY does in a larger manner; but it is essentially the same thing. The Düsseldorf men expend their last sigh upon the reticulation of a leaf, and let the tree shift for itself. CROPSEY will have the sunflower and the sheep, and the landscape must take its chance. The result in both cases is, that you are taught the exquisite veining of the leaf, and recognize in the sunflower your old friend of a hundred gardens, but the landscape does not haunt you, and return again and again, like a strain of winning music. In No. 50, what an aggregation of beautiful and poetic objects: palms, the most poetic of trees—graceful temples with delicate tracery—a summer sea—the snow-needles of an Alpine distance piercing the tranquil day—the leading of flocks by still waters—all the imagery of pastoral poetry and of midsummer dreams and idyls, and yet the spectator wonders why the picture fails to soothe him into tropical reverie. But the old artist who, from the soft eyes of one woman, and the flowing luster of another's hair, and the curved lips, rounding form, and differing perfections of many others, sought to model a single overpowering beauty, has solved the wonder.

Fine words do not make a poem. Picturesque forms, brilliantly painted, do not make a good picture. They must be harmonized into a single impression, and that impression must be neither partial, nor commonplace, nor obvious, but direct and beautiful. Thus, let us cite for illustration CAPELLEN's *Norwegian Forests* (410) and DIAZ's *Cows in a Wood*, (75,) pictures of very differing styles of feeling and treatment. Neither of these works have any prestige of poetic association to propitiate the eye. No. 75, is an ordinary, homely cattle piece, and No. 410 is a passage of not unfrequent forest scenery, a damp pool in the darkness of heavy woods, with old, rotting, mossy trunks lying in the water, set in slimy, slippery rocks and rank growths. The first of these pictures is very small, and consists of a mass of foliage, upon which is relieved a group of cows. From too much varnishing, probably, it has an unnaturally burnished look, but it is a characteristic piece of the master. What is the secret of the pleasure it imparts? It is not only the easy mastery of brilliant color, it is no exquisite witchery of form, it is no collateral suggestion like that derived from objects of certain association, but it is the reproduction of that passage in nature, so simply done, and so skilfully, as well in what is omitted as in what appears, that a glance at it, even in dreary weather, is a strain of summer, and begets the mood which the scene itself inspires. This simple reminiscence is certainly not the highest triumph of art, but it is a great success, and its secret is in the subjugation of the material to the single impression sought. CROPSEY strikes higher. The aim of his picture is to represent the *Spirit of Peace*, and of course the point of the picture is to show that the tranquil life of the landscape is the result of Peace. To do this, evidently, something more is necessary than to paint a scene without an army. The artist has composed for that purpose, an unreal landscape—a scene, that is, of which the features are drawn from Nature, but which have an artificial and conventional grouping in the picture, and which, therefore, as an illustration of the reign of Peace upon earth and among men, remove it from sympathy. It is rather a passage of Arcadia. It is no more the *Spirit of Peace*, in the sense intended, than the *Southern Italy* was, or than any quiet landscape is. It is, indeed, a *peaceful* scene, but that is not the intention.

The truth is that the subject demands a kind of allegorical treatment. The aim is not only to represent the effects of Peace, which any picture of a scene betraying no devastation of War does, but to force the contrasts of Peace and War upon the observer's mind, by something which shall emphasize the fact that this state of things proceeds from Peace. It aims, that is to say, to exercise a certain direct moral influence. In this it fails. No spectator would feel upon regarding the picture that it was intended to charm him with Peace as the cause of the tranquillity represented. That has been done, however, by Landseer, and his picture of Peace is an adequate illustration of our position. The sheep cropping the flowers that grow in the rusty cannon's mouth and the busy aspect of the distant seaport tell the story without any lettering. When sheep feed in the cannon's mouth, then factories smoke and craft of all kind sail. Had the cannon been omitted, the picture would have been no more distinctively *Peace* than the cattle-bit of Diaz. It is just this stroke which makes it a work of art, and not merely a pleasing picture.

We have indicated sufficiently our feeling in respect of the treatment and conception of this landscape. It is true of the companion piece, and it is in general true of the works of Mr. CROPSEY. He yields to no man in his love of nature, in the patient fidelity with which he studies and elaborates her forms, and his glowing and teeming imagination speaks in his brilliant color. There is always great pleasure in the study of his pictures, in the pursuit of the well-wrought detail, which is, on the whole, their cardinal defect, because it only detail. The glaciered precipices in the left of No. 48, and the angry massing of clouds in the right of the same picture, have a reality and depth of feeling, and a skill of treatment, to which we are the last to be insensible. In his *Italy, a Study*, (279,) there is a pathetic sentiment, so just and poetic,—a comparative simplicity and subjugation of material, and a sweeping grace of handling, which makes it, to our fancy, the pleasantest of his pictures. Its value is kindred to that of No. 75, by Diaz, and to the quoted picture of Landseer. The story is told. That nameless grace, that poetic elegance, that air of romantic decay,—are Italy. It is no real landscape, indeed, nor was it meant to be. It is a pensive thought. It is a picture, which, like Landseer's, requires no lettering, but which every man who has truly seen Italy, directly recognizes.

FROM NEW-YORK TO NINEVEH.

XXV.

VOYAGE ON THE ETHIOPIAN NILE—VISIT TO THE RUINS OF MEROE—LIFE IN CENTRAL AFRICA—ARRIVAL AT KHARTOUM.

Editorial Correspondence of the N. Y. Tribune.

KHARTOUM, (Capital of Egyptian Soudan,) Monday, Jan. 12, 1852.

EL MECHEYREF looked very picturesque in the soft clear light of the last afternoon hour, as I sailed away from it. The Bey's mansion and the mosque rose conspicuously above the long lines of clay walls, and groups of luxuriant date-trees in the gardens supplied the place of minarets and spires. Both shores, above the city, were in a high state of cultivation, and I passed many thriving villages before dusk. The landscapes next morning were still more beautiful. The Nile was as broad as in Lower Egypt, flowing between banks of the most brilliant green. Long groves of palms behind the shore, shut out from view the desert tracks beyond, and my voyage all day was a panorama of the richest summer scenery. Early in the forenoon I passed the mouth of the Atbara, the ancient Astaboras, and the first tributary stream which the traveler meets on his journey from the Mediterranean. Its breadth is about one-third that of the main river, but the volume of water must be in a much smaller proportion. The water is a clear, bright green, and its junction with the darker Nile is distinctly marked. I could look up the Atbara for about a mile to where it curved out of sight between high green banks, covered with flowering mimosas. It was a charming piece of river scenery, and I longed to follow that stream upward through the wild domains of the Hallengas and Hadendoas, through the forests and jungles of Takka and Schangalla, to where, an impetuous torrent, it foams through the Alpine Highlands of Samen, under the eternal snows of Abbagaret and Amba-Hai. In Abyssinia it bears the name of Tacazza, but afterwards, through